

Chapter 3.55

DESIGN STANDARDS FOR RECREATIONAL FACILITIES

*The Parks and Recreation Department is assigned
responsibility for administration of these design standards.*

Section 1. TENNIS COURTS

Standard overall size for a one unit tennis court shall be 60 feet (60') x 120 feet (120'). Playing lines shall be placed for both single and double play, as recommended by the U.S. Tennis Association. For a multi-court system, twelve feet (12') clearance between playing lines of courts and twenty feet (20') at back sides between the edge of out surface or fence, shall be maintained. Overall tennis court area shall be fenced, either by complete enclosure with walk-in gates (maintenance gates also needed) or partial enclosure covering two-thirds (2/3) of lateral dimension and back sides, leaving mid-section's one third (1/3) open, both sides of the court. Fence fabric shall be rust proof, minimum 10 feet (10') high, nine (9) gauge chain link fencing. Top and mid-rail shall be used and posts shall not exceed 10 foot (10') spacing center to center. The tennis courts may be constructed using concrete or asphalt. Concrete courts shall be at least five inches (5") thick with eight (8) gauge woven wire mesh reinforcing, expansion and contraction joints shall be of compatible non-tracking joint filler and placed where they will least disrupt playing area. The concrete is to be placed on a well compacted sub-grade and minimum four inches (4") of sand/gravel cushion. Asphaltic courts shall be at least five inches (5") thick, place on a well compacted and stabilized sub-grade with minimum eight inches (8") of sand/gravel cushion. The overall dimensions of both types of courts shall overlap fence lines by at least six (6) on all sides as preventative maintenance.

Section 2. SWIMMING POOLS

Swimming pools shall be designed by a competent licensed engineer or architect. Design shall follow sanitary and safety requirements for construction, equipment, operation of pools and preparation of bather facilities as covered in the Nebraska Swimming Pool Act by the State of Nebraska Department of Health, including all applicable codes, rule and regulations of Lancaster County and City of Lincoln.

Section 3. GOLF COURSES

Golf course design and construction shall be accomplished by a licensed golf course architect. The design shall follow recommendations of U.S. Golf Association, and/or other reliable golf associations of national standings.

Section 4. PLAYGROUND DESIGN STANDARDS

4.1 Equipment Type

- A. All heavy duty play equipment shall be manufactured by manufacturers of heavy duty playground equipment as named in Appendix A.
- B. Custom design and built play equipment not manufactured by a heavy duty playground company shall meet the recommendations of the "National Recreation and Parks Association" which are given in the following areas shall be considered in the design of and construction of playground equipment:
 - 1. Materials of manufacturer and construction.
 - 2. Sharp edges, points, protrusions and crush points.
 - 3. Moving impact.
 - 4. Entrapment
 - 5. Falls from equipment

4.2 Safety

- A. All play equipment shall have at least a 6 foot (6') safety distance with no obstructions around its perimeter unless otherwise stated.
 - 1. Swing shall have a 12 foot (12') safety distance measured from the center rail (where the swings are hung from) to the front of the swing and 12 feet (12') from the center rail to the rear of the swing. This shall be a total of 24 feet (24')
 - 2. Slides shall have a safety distance of six feet (6') to eight feet (8') measured from the point of exit.
 - 3. 10 foot (10') Whirl or larger shall have an 8 foot (8') safety area around its perimeter.
- B. Safety Ground cover shall be either 6 inches (6") or 8 inches (8") of sand, sand/gravel or approved rubber mat (at least 1 1/8" thick). The safety ground cover shall be required in all safety areas in and around equipment.
- C. Equipment that is area directional, such as slides, shall be oriented to minimize the hazards of direct hot sun rays. Tennis and other court game surfaces shall be constructed in a north-south direction.
- D. All equipment shall be installed as per manufacturer's specifications. Both custom equipment and standard manufactured equipment shall meet the safety requirements as outlined in No. 1, A-Equipment Types and No. 1, B-Custom Equipment.

- E. Maintenance shall be required and made as the need arises. The following table shall serve as a safety check list:

4.3 Suggested Playground Equipment Maintenance Safety Checklist

ITEM	LOOK FOR
Structure	Sharp edges, bending, exposing moving parts, warping, cracking, loosening, breaking, etc.
Surface Finish	No protective coating, rust, other corrosion, cracks, splinters, checking, harmful, preservatives or points, etc.
Hardware	Missing, bent, broken, loosened, open hooks, etc.
Edges	Sharp points, or edges protruding bolts, or other protrusions, etc.
Pinch or Crush Points	Exposed mechanisms, junctures of moving components, etc.
Mechanical Devices and Other	Worn bearings, lubrication needed, missing protective covers, etc.
Hand Rails	Missing, bent broken, loosened, etc.
Ladders and Steps	Missing rungs or steps, broken, loosened, etc.
Swing Seats	Missing, damaged, loosened, sharp corners, etc.
Footings	Exposed, cracked, loose in grounds, etc.
Protective Surfacing Under	Compacted, displaced to ineffective level, does not extend to potential impact area, unsanitary, poor drainage, etc.

Section 5. OUTDOOR RECREATIONAL LIGHTING

Lighting which illuminates outdoor recreational facilities shall conform to these City standards.

The aim of these standards is to provide guidelines to insure that lighting of recreational facilities in the City of Lincoln is adequate, does not cause visual interference on public thoroughfares, and minimizes its adverse impact upon adjacent residential uses. The entire lighting system shall be so

positioned as to direct lighting away from the immediately abutting properties and public ways. It is also the purpose and intent of this standard to minimize light pollution which as a detrimental effect on astronomical observations. Except as noted in these standards, the recreational facility will be lit in accordance with the Eight Edition of the Illuminating Engineering Society of North America (I.E.S.), "Lighting Handbook".

There are three major controllable components of a lighting system that directly affect the quality of a lighting system. These are: Light intensity levels, uniformity of light distribution and glare. When these factors in a lighting system are managed in an appropriate way, intended use of a system is maximized and misuse is minimized.

The goal for lighting recreational activities is to provide an appropriate light environment so the event will appear clear and sharp to the players and spectators.

Except by special permission of the City, no outdoor recreational facility, public or private, shall be illuminated after twelve midnight (12:00) except to conclude a specific activity which is in progress under such illumination prior to twelve midnight (12:00).

5.1 General Requirements

5.1.1 Light Intensity Level

A. Illumination Level

The illumination level shall not exceed the minimum of the I.E.S. specifications by more than 20%.

B. Illumination Levels Beyond the Property Line of the Recreational Facility

Illumination levels, attributable to the recreational facility lighting system shall not exceed one-half (0.5) maintained horizontal footcandle nor two (2.00) initial vertical footcandles on other properties, except public ways, within a residential zoning district. Vertical footcandles shall be the initial footcandle levels measured at thirty-six inches (36") above the ground with a meter aimed toward the brightest light bank.

5.1.2 Uniformity Ratio

The uniformity ratio shall be in conformance with the I.E.S. standard.

5.1.3 Glare Control

The luminaires shall meet and shall be installed to operate as IES "Cutoff" type luminaire designation is when the candlepower of the lamp does not numerically exceed 2.5% of the total lamp lumens at an angle of ninety degrees (90°) above nadir (horizontal) and 10% at a vertical angle of eighty degrees (80°) above nadir.

The luminaires shall shield the light source above seventy-two (72°) above nadir. This shielding angle is required to minimize the discomfort glare to the observer at normal viewing angle.

Shields may be installed on the luminaires to achieve these requirements.

5.2 Continuation of Nonconforming Lighting

The lawful use of existing lighted outdoor recreational facilities may be continued. Future renovations or upgrades to such facilities in use prior to the effective date of this Resolution shall not exceed existing illumination levels or I-B above, whichever is greater, beyond the perimeter of the recreational facility.